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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,306	07/13/2004	Junichi Ogikubo	450100-04815	6116

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EXAMINER

KHOKHAR, ASIF I

ART UNIT	PAPER NUMBER
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2609

MAIL DATE	DELIVERY MODE
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08/21/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/501,306

Applicant(s)

OGIKUBO, JUNICHI

Examiner

Asif Khokhar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-9,11-17,27-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,3-9,11-17,27 and 28 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07/13/2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

1. Applicant's election of Group 1, claims 1-17 and 27-28 in the reply filed on 07/05/2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Drawings

The drawings are objected to under 37 CFR 1.83(a) because in Fig. 1 transmission data DTz should be written as DTc as explain in specification, page 10, line 21. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

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the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Claim(s) 17, 27-28 is/are rejected under 35 U. S. C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim 17 defines a program embodying functional descriptive material. Claim(s) 27-28 define a recording medium. However, the claims do not define a program which stores in a computer readable medium or memory and a computer readable recording medium and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to

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the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized" - Guidelines Annex

For claim 17, "A program which stores in a computer readable medium executed by a computer causing a computer to perform---" is suggested.

For claim 27-28, " A computer readable medium executed by a computer ---" is suggested.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim(s) 1 is/are rejected under 35 U.S.C. 102(e) as being anticipated by Cok '750.

With reference to claim 1, Cok '750 discloses a transmission apparatus (Fig. 6) which comprises transmit data generation means for generating transmit data by linking to main data representing an image and/or audio accessory information including information on a frame rate of this main data (A digital camera 73, digital computer 80, and storage device 80 make a transmit data generation mean, Fig. 6, Furthermore, each frame in the processed digital motion image sequence has an associated duration, which is used to specify the length of time for which the frame is presented. This duration can vary from frame to frame in the sequence. To

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accomplish this, each frame in the image sequence is accompanied by meta-data information describing the frame rate (or exposure time) for each frame in the image sequence, paragraph 0023. Meta-data is image accessory information. Image taken by camera is main image and processed image from camera to computer 74 is transmit data.); and transmission processing means for performing output processing on the transmit data via a transmission channel (The digital data representing the motion image sequence is processed in a digital computer 76, paragraph 0026. Digital computer 76 is transmission-processing mean. It is connected to digital camera via a wire line as shown in Fig. 6. Wire line is transmission channel as described by the applicant), wherein the transmit data generation means includes: accumulation means for accumulating the main data temporarily (a storage medium such as an optical disc apparatus 80, paragraph 0026); and read processing means for controlling read processing of the main data accumulated in the accumulation means (Computer 76, paragraph 0026, inherently have a read processing control which controls the read processing), wherein the transmission processing means informs the read processing means of a band of the transmission channel, and wherein the read processing means controls reading of the main data in accordance with the band thus informed, thereby adjusting the frame rate of the main data (The effective frame rate can be modified to deal with other issues. For example, the effective frame rate might be reduced in response to other limitations in the system such as storage or bandwidth or computing capability, or to compensate for processing artifacts, paragraph 0028. Effective frame rate adjust in digital camera, wherein a CPU/microcontroller controls the entire operation including the reading of main data. A computer is transmission-processing mean, which informs the camera regarding the limitation such as storage capacity or bandwidth.)

With respect to claim 2, claim 2 has been cancelled.

With reference to claim 3, Cok '750 discloses information modification means for modifying frame rate information contained in the accessory information, in response to adjustment of the frame rate by the read processing means (a digital computer 76 to create an image sequence having portions with different effective frame rates, paragraph 0026. Computer 76 modifies the frame rate information according to the adjustment of the frame rate by the read processing means. Furthermore, a motion image sequence 20 is originally captured at 24 frames per second. Because of the changes in scene content, an effective change rate of 48 frames per second is selected for display. To create this faster frame rate sequence, the image sequence 20 is processed, paragraph 0021. Which is modification of frame rate by computer 76 from 24 frames per second to 48 frames per second.)

With reference to claim 4, Cok'750 disclose that the accessory information includes information indicating a recommended reproduction speed of the main data (FIG. 3 illustrates a more complex example. In FIG. 3 an original motion image sequence 30 is captured at 24 frames per second and the effective frame rate is determined to be 32 frames per second, page 2, paragraph 0022; 32 frames per second is a recommended reproduction speed of the main data.)

With reference to claim 5, Cok'750 disclose that the accessory information includes information indicating a reproduction-enabling maximum speed of the main data (Because the

lowest common multiple of the various effective frame rates within an image sequence can readily become very large, it is expedient to limit the number of allowed effective rates (thereby limiting the maximum presentation frame rate). This is readily accomplished by rounding an effective frame rate for a portion of an image sequence to the next highest allowed frame rate, page 3, paragraph 0025; maximum presentation frame rate is reproduction-enabling maximum speed of the main data.)

With reference to claim 6, Cok'750 disclose the transmit data generation means links as the accessory information at least the frame rate information and frame identification information of each frame included in a reference frame period to the main data (each frame in the processed digital motion image sequence has an associated duration which is used to specify the length of time for which the frame is presented. This duration can vary from frame to frame in the sequence. To accomplish this, each frame in the image sequence is accompanied by meta-data information describing the frame rate (or exposure time) for each frame in the image sequence, paragraph 0023; An image is accompanied with meta-data which is accessory information and information on frame rate are included. Furthermore, Where the effective frame rate is less than the original frame rate, the reduction in frames can be readily accomplished by deleting frames, by replacing a number of frames with an average over multiple frames, or by interpolating a representative frame for the multiple frames in the motion image sequence to create an image sequence having the effective frame rate. Where the effective frame rate is greater than the original capture frame rate, additional frames can be created by frame interpolation to create an image sequence having the effective frame rate, page 2, paragraph 0020; effective frame rate is

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less than the original frame rate and effective frame rate greater than the original capture frame rate is frame identification information because it is identifying the frame rate. Original frame rate is reference frame period to the main data since frame rate less then or greater then is based on it. Data is being generating according to by linking frame rate information and frame identification information.)

With reference to claim 7, apparatus claim 7 corresponds to apparatus claim 1^{and} is analyzed same as previously discussed with respect to claim 1.

With reference to claim 8, apparatus claim 8 corresponds to apparatus claim 3^{and} is analyzed same as previously discussed with respect to claim 3.

With reference to claim 9, method claim 9 corresponds to apparatus claim 1^{and} is analyzed same as previously discussed with respect to claim 1.

With reference to claim 10, claim 10 has been cancelled.

With reference to claim 11, method claim 11 corresponds to apparatus claim 3^{and} is analyzed same as previously discussed with respect to claim 3.

With reference to claim 12, method claim 12 corresponds to apparatus claim 4^{and} is analyzed same as previously discussed with respect to claim 4.

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With reference to claim 13, method claim 13 corresponds to apparatus claim 5^{and} is analyzed same as previously discussed with respect to claim 5.

With reference to claim 14, method claim 14 corresponds to apparatus claim 6^{and} is analyzed same as previously discussed with respect to claim 6.

With reference to claim 15, method claim 15 corresponds to apparatus claim 4 and 6^{and} is analyzed same as previously discussed with respect to claim 4 and 6.

With reference to claim 16, method claim 16 corresponds to apparatus claim 3^{and} is analyzed same as previously discussed with respect to claim 3.

With reference to claim 17, method claim 17 corresponds to apparatus claim 1^{and} is analyzed same as previously discussed with respect to claim 1. A computer 76 inherently have program for causing a computer to perform a transmission method.

Applicant has canceled claim 18-26.

With reference to claim 27, Cok '750 discloses a recording medium (storage device 80, paragraph 0028) for recording main data representing an image and/or audio with accessory information including information of a frame rate of this main data being linked to the main data (each frame in the processed digital motion image sequence has an associated duration, which is

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then or greater then is based on it. Data is being generating according to by linking frame rate information and frame identification information.)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Asif Khokhar whose telephone number is (571) 270-3221. The examiner can normally be reached on Monday- Friday 7:30am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Ho can be reached on 571 272 7365. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


TUAN HO
PRIMARY EXAMINER

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used to specify the length of time for which the frame is presented. This duration can vary from frame to frame in the sequence. To accomplish this, each frame in the image sequence is accompanied by meta-data information describing the frame rate (or exposure time) for each frame in the image sequence, paragraph 0023. Meta-data is image accessory information.)

With reference to claim 28, Cok '750 discloses that the accessory information includes frame identification information of each frame included in a reference frame period (each frame in the processed digital motion image sequence has an associated duration, which is used to specify the length of time for which the frame is presented. This duration can vary from frame to frame in the sequence. To accomplish this, each frame in the image sequence is accompanied by meta-data information describing the frame rate (or exposure time) for each frame in the image sequence, paragraph 0023; An image is accompanied with meta-data which is accessory information and information on frame rate are included. Furthermore, Where the effective frame rate is less than the original frame rate, the reduction in frames can be readily accomplished by deleting frames, by replacing a number of frames with an average over multiple frames, or by interpolating a representative frame for the multiple frames in the motion image sequence to create an image sequence having the effective frame rate. Where the effective frame rate is greater than the original capture frame rate, additional frames can be created by frame interpolation to create an image sequence having the effective frame rate, page 2, paragraph 0020; effective frame rate is less than the original frame rate and effective frame rate greater than the original capture frame rate is frame identification information because it is identifying the frame rate. Original frame rate is reference frame period to the main data since frame rate less